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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/536,695

05/27/2005

Danping Chen

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FITCH, EVEN, TABIN & FLANNERY
P. O. BOX 18415
WASHINGTON, DC 20036

EXAMINER

BOLDEN, ELIZABETH A

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

12/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/536,695	Applicant(s) CHEN ET AL.	
	Examiner ELIZABETH A. BOLDEN	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3, 10 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 27 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/27/05, 10/28/05, 10/2/06</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group II, claims 14-20 in the reply filed on 16 September 2008 is acknowledged. The Examiner noticed that claim 10 was incidentally left off of the claims listed in Group II, and has added claim 10 to Group II, now claims 10 and 14-20.

This application contains claims 3 and 21-26 drawn to an invention nonelected with traverse in the reply filed on 16 September 2008. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDSs submitted 27 May 2005, 28 October 2005, and 2 October 2006 have been considered by the Examiner.

Drawings

The original drawings received on 27 May 2005 are accepted by the Examiner.

Specification

The disclosure is objected to because of the following informalities:

The specification is objected to since it does not include a Brief Description of the Drawings section.

Appropriate correction is required.

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Claim Rejections - 35 USC § 102 and 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 14, 15, 17, 18, and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Debnath, U.S. Patent 5,627,112.

Debnath discloses a copper thermoluminescence glass wherein the final glass comprises 94-97 wt% SiO₂, 0.4-2 wt% Al₂O₃, 2-6 B₂O₃ and copper. See Abstract and column 2, lines 16-62. The compositional ranges of Debnath are sufficiently specific to anticipate the glass as recited in claims 10, 14, 15, and 17. See MPEP 2131.03. Claims 10, 18, and 20 define the product by how the product was made. Thus, claims 10, 18, and 20 are product-by-process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present case, the recited steps imply a structure of a high silica glass containing the components in the recited amounts. The reference suggests such a product. See column 2, lines 16-62 of Debnath. While the process limitations are not needed in the rejection of the product claims Debnath discloses the process of forming a high silica glass from a borosilicate glass, thought the heat treatments to cause phase separation and acid etching out the borate rich phase which results in a porous high silica glass. See column 2, lines 19-47, this is commonly known in the art as the process to make the porous high silica glass known as Vycor™.

However, Debnath does not disclose any examples that anticipate claims 10, 14, 15, 17, 18, and 20.

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Therefore, in the alternative to the § 102 rejection the reference discloses a composition that has overlapping ranges of components with the instant claimed glass, and overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debnath, U.S. Patent 5,627,113 in view of Huston et al., U.S. Patent 6,211,526.

Debnath teaches high silica glass composition used for thermoluminescence glass. See above rejection.

Debnath fails to teach that the high silica glass, Vycor™ contains a rare earth dopant of claim 16 and the additional component of claim 19.

Huston et al. teach a luminescent glass which uses a porous Vycor™ glass which is doped with a sulfide compound and copper or cerium. See Abstract and column 4, lines 28-33.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a high silica luminescent glass of Debnath as suggested by Huston et al. because the resultant glass would have the luminescent properties as recited.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH A. BOLDEN whose telephone number is (571)272-1363. The examiner can normally be reached on 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/
Supervisory Patent Examiner, Art Unit 1793

Elizabeth A. Bolden
/Elizabeth A. Bolden/
Examiner
Art Unit 1793

EAB
19 December 008